DERMATOLOGY.

UNDER THE CHARGE OF

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Parapsoriasis.—BROCQ (*Annales de Dermatologie et de Syphiligraphie*, 1902, No. 4) proposes to call by the above title a series of rare eruptions which have been described by various authors under the names *parakeratosis variegata, exanthème special psoriasiforme et lichénoïde, dermatite psoriasiforme nodulaire, pityriasis lichénoïde chronique, erythrodermies pityriasiques en plaques disséminées*, and *lichen variegatus*. He divides the cases into three principal varieties, viz., guttate parapsoriasis, lichenoid parapsoriasis, and parapsoriasis in plaques. Histologically these cases are characterized by an infiltration of round cells around the papillary vessels which are dilated, by flattening of the papillæ, by marked œdema of the upper part of the derma and the epidermis, by an almost complete disappearance of the germinating layer, by dilatation of the intercellular spaces of the prickle-cell layer and the presence of leucocytes in these spaces, and by œdema of the granular layer which is absent in many places, at which points nuclei are found in the cells of the corneous layer. The duration of these affections is very long. They are not accompanied by itching, nor do they affect the general health. The most effective local application is pyrogallol employed perseveringly and energetically.

Acne and Sycosis Treated by Exposures to Roentgen Rays.—PUSEY (*Journal of Cutaneous and Genito-Urinary Diseases*, May, 1902) reports eleven cases of acne vulgaris and one of sycosis vulgaris treated by exposure to the X-rays. In no case of acne in which such treatment has been carried out for a reasonable period have beneficial results failed to appear, and the author considers this form of treatment an advance over all other methods hitherto employed. All the cases were exposed to a very weak light, using a current just strong enough to illuminate a fairly soft tube. The cases were unusually susceptible, and upon the first sign of erythema or pigmentation the treatment was suspended. The author warns those wishing to use this method of treatment against employing any but the weakest light. In a case of sycosis treated in this manner all evidence of disease had disappeared at the end of three months, and no new lesions have appeared since.

Radiotherapy and Phototherapy.—FREUND (*British Journal of Dermatology*, September, 1902, p. 339) states that all radiant phenomena have the same physical basis. The physical properties of rays as applied to the skin possess chemical, fluorescent, and electrical properties, the effect varying with the dosage, from mere stimulation to destruction of tissues. In weak dosages the rays favor organic processes, such as growth of hair and production of pigment, but in stronger dosage they lower vitality, produce inflammation or actual necrosis.

Radiant heat, light, electricity, and X-rays similarly influence cell-life. As to the clinical effects of radiotherapy, the physiological effects are in direct proportion to the intensity of the "raying," but are in inverse proportion to the wave lengths. The reactions appear after a latent interval, the length of which is also inversely proportional to the wave-lengths and intensity of the "raying." Those rays which have the property of exciting fluorescence are also physiologically the most powerful. The action of the rays is long persisting. Freund believes that in so-called "D'Arsonvalisation" the effects are solely due to the spark-discharges accompanying the use of the apparatus. All spark-discharges may cause physiological effects, which may result from (*a*) the mechanical bombardment of the tissues, (*b*) the production of heat, (*c*) chemical effects—formation of ozone, and (*d*) ultra-violet ray formation. The effects of sparking vary according to its intensity, being either stimulating or destructive. On the skin they affect the vasomotor system and tend to cause necrosis of the epidermis.

The action of D'Arsonval's apparatus is superficial and due only to the accompanying spark-discharge, and is useful in pruritus, lupus erythematosus acne vulgaris, and pigmentary abnormalities. A simple spark-apparatus consists of a test-tube filled with water and connected with the negative pole of a coil, the positive pole being earthed. With this apparatus Brush-discharges can be obtained equal to those of Oudin's apparatus. The Brush-discharge is useful for widespread areas of disease and in the case of nervous people, the spark-discharge being applicable to more circumscribed areas. Treatment with the "electrified hand" is another spark-method, but a very mild one.

The effective factors in the X-ray method are probably the X-rays themselves and the electric surface tension of the tubes. Vasomotor effects are produced as in ordinary spark discharges. The skin diseases suitable for X-ray treatment are ringworm of the scalp, tinea favosa, sycosis, and hypertrichosis -all diseases in which the chief therapeutic feature is the removal of hair. In this class the X-rays are much more effective than the light rays, but both methods stand much on an equal footing in the remaining class of cases. The depilatory properties of the X-ray tube are due to direct destructive action or to alteration in the blood supply of the follicles. X-rays possess no bactericidal properties.

In comparing the X-ray method and Finsen's light method for lupus vulgaris, Freund states that about the same length of time is required in the two methods, and that the results of both are equally good as regards the scarring. Practically identical results can be obtained with either hard or soft tubes by adapting the time of exposure, strength of current, and distance of the tube. With hard tubes the radiation can be pushed until visible effects are produced, whereas with soft tubes one must work more in the dark and make allowance for reactions before they are visibly manifest. The author regards Finsen's apparatus as superior to Bang's lamp.